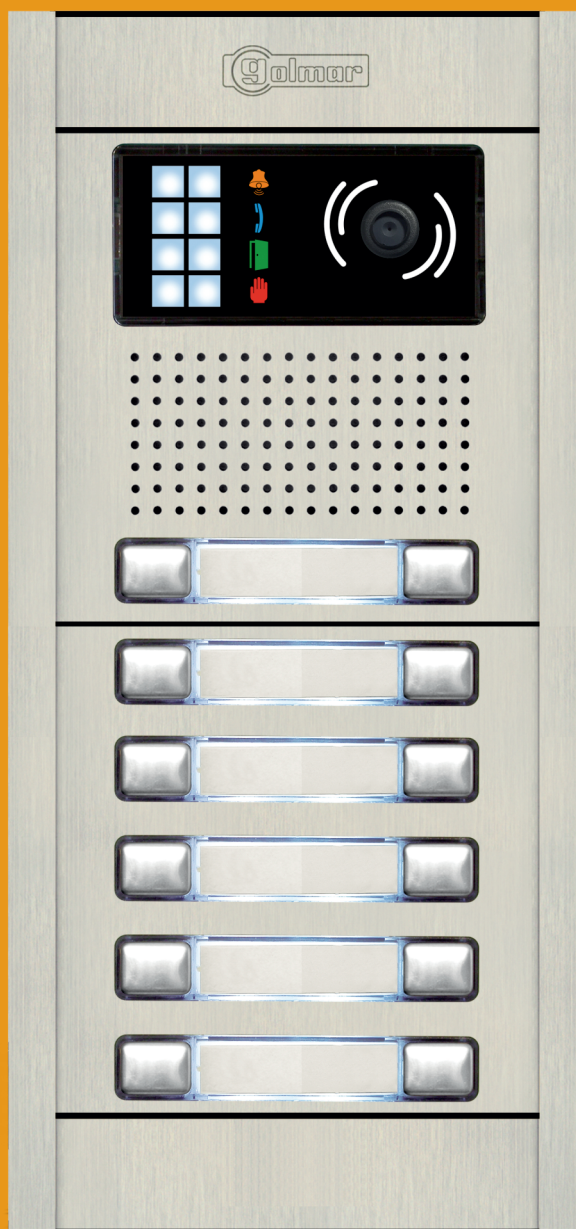


# USER MANUAL



## Video door entry system 2 wires installation GB2 Nexa Modular

## INTRODUCTION

First of all we would like to thank and congratulate you for the purchase of this product.

The commitment to reach the satisfaction of our customers is stated through the ISO-9001 certification and for the manufacturing of products like this one.

Its advanced technology and exacting quality control will do that customers and users enjoy with the legion of features this system offers. To obtain the maximum profit of these features and a properly wired installation, we kindly recommend you to expend a few minutes of your time to read this manual.

## INDEX

Introduction.....	2
Index.....	2
Starting recommendations.....	2
Safety precautions.....	3
Characteristics.....	3
System operation.....	3
Door panel description (Nexa Modular).....	
Door panel description.....	4
Sound module description (EL632-GB2).....	5
Push buttons module description (EL610D).....	6
Embedding box positioning.....	7
Preparing the cables entry.....	7
Place the embedding box.....	8
Assembly electronic modules.....	8
Hold the frame.....	9
Plug the push buttons with the sort connection cable.....	9
Plug the push buttons with the connection cable (RAP-610D).....	10
Push buttons coding.....	10
Double push button module coding.....	11
Single push button module coding.....	12-13
Configuration dip-switch.....	14
Configuration jumper.....	14
Description of the leds lighting (low light conditions).....	14
Description of the visual indications on the door panel.....	14
Description of the vocal synthesis (audible indications from the door panel).....	15
Adjusting the door panel communication volume.....	15
Adjusting the vocal synthesis volume.....	15
Selecting the vocal synthesis language.....	16
Configuring the contact type for Relay 1 and Relay 2 (door release).....	16
Close the frame.....	16
Place the nameplate labels.....	16
Door panel and double door panel assembly.....	17-18
Close the door panel.....	19
Power supply installation (FA-GB2).....	20
Lock release Installation.....	20
Installation diagrams.....	21-26
Notes.....	27

## STARTING RECOMMENDATIONS

- Do not use excessive force when tightening the power supply connector screws.
- Install or modify the equipment, **without the power connected.**
- The installation and handling of these equipments must be performed by **authorised personnel.**
- The entire installation must be at least **40cm.** away from any **other installation.**
- Before to connect the system, check the connections between door panel, power supply, distributors, memory module MM-GB2, camera unit D-CAM-GB2, interface GSM-GB2, monitors and telephones.
- Use **RAP-2150** (2x1mm<sup>2</sup>) Golmar cable.
- Do always follow the enclosed information.











## SAFETY PRECAUTIONS

- Install or modify the equipment, **without the power connected**.
- The installation and handling of these equipments must be performed by **authorised personnel**.
- The entire installation must be at least 40 cm. away from any **other installation**.
- With power supply:
  - ⚠ Do not use excessive force when tightening the connector screws.
  - ⚠ Install the power supply in a dry and protected place without risk of drip or water projections.
  - ⚠ Avoid to place it near to heating sources, in dusty locations or smoky environments.
  - ⚠ Do not block ventilation holes of the unit so that air can circulate freely.
  - ⚠ To avoid damage, the power supply has to be firmly fixed.
  - ⚠ To avoid an electrical shock, neither remove the protection cover nor handle the connected wire in the terminals.

## CHARACTERISTICS

- Video door entry system with simplified installation (2 wire bus without polarity).
- Up to 4 access door panel (necessary DP-GB2 distributor for more than 1 door panel access) per installation.
- Up to 20 monitors and apartments with Vesta monitor per installation.
- Up to 15 monitors and apartments with Thera monitor per installation.
- Up to 4 monitors per apartment.
- Acoustic call acknowledgment signal.
- Visual indications on the door panel for people with impaired hearing, indicating (call progress, communication, door open and system busy).
- Audible indications from the door panel for people with impaired vision, indicating (call is in progress, resident unavailable, door is open, communication is finished and system is busy).
- Door opening timed at 1 or 5 seconds.
- 2 outputs for lock release (separate activation).
- Output "Relay 1": a.c or d.c lock release operated by relay.
- Output "Relay 2" a.c or d.c lock release operated by relay.
- Input for external door release push button (Relay 1).
- Input for external door release push button (Relay 2).
- Maximum distance between power supply and furthest door panel: 80m with a wire section of 1mm<sup>2</sup>.
- Maximum distance between power supply and furthest distributor: 80m with a wire section of 1mm<sup>2</sup>.
- Maximum distance distributor and monitor: 40m with a wire section of 1mm<sup>2</sup>.

## SYSTEM OPERATION

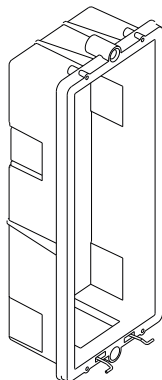
- To make a call the visitor should press the push button corresponding to the desired apartment; an acoustic tone will be heard confirming the call is in progress once the push button has been pressed and the led  will turn on. If the vocal synthesis is enabled the message "call is in progress" will be heard confirming the call is in progress. At this moment the apartment's monitor(s) receives the call. During the call the visitor can correct his call by pressing a push button corresponding to a different apartment, in which case the original call is cancelled.
- In systems with several accesses doors, the other(s) door panel(s) will be automatically disconnected: if a visitor tries to call from other door panel an acoustic tone will be heard and the led  will turn on. If the vocal synthesis is enabled the message "system is busy, try later" will be heard confirming the system is busy.
- The call lasts for 40 seconds. Without alerting the visitor, their image is displayed on master monitor to receive the call. To view the picture on a slave monitor this function must first be activated in the monitor. If the call is not answered within 40 seconds, the led  will turn off and the system will be freed.
- To establish communication, press the push button  of any monitor to the apartment; door panel led  will turn on. If the vocal synthesis is enabled the message "you can speak now" will be heard confirming the communication is activated.
- Communication will last for one and a half minutes or until the button  is pressed again. Once the communication has finished, the leds  and  will turn off and the system will be freed. If the vocal synthesis is enabled, the message "communication is finished" will be heard in the door panel confirming the communication has finished.
- To open the door, press the door release push button  during call or communication progresses: with one press, the door release operates for 5 seconds, the led  will also turn on for 5 seconds. If the vocal synthesis is enabled, the message "door is open" will be heard in the door panel.
- For the operation and configuration monitor, see the corresponding monitor manual.

## DOOR PANEL DESCRIPTION (NEXA MODULAR)

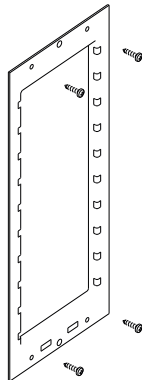
### Door panel description:

General detail of parts, for assembly the door panel.

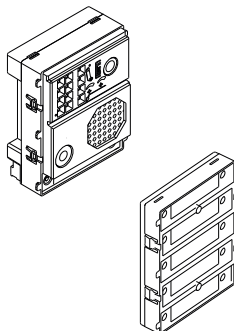
Embedding boxes



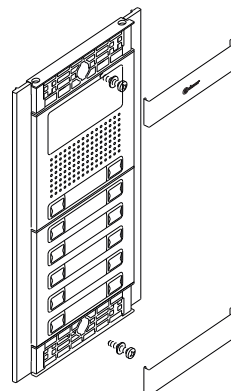
Frame modules



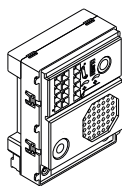
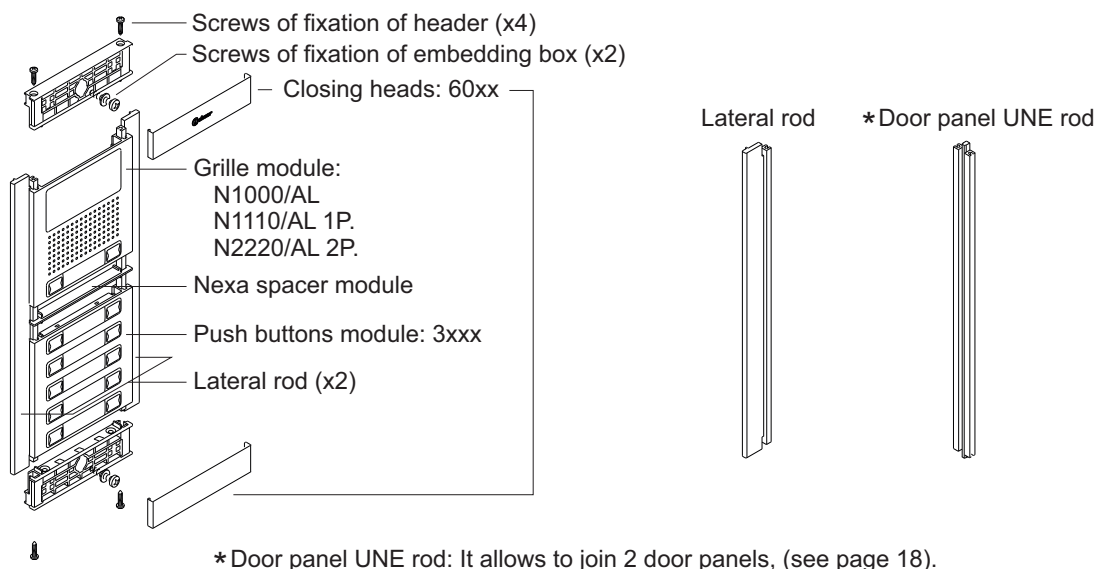
Electronic modules



Aluminium door panel

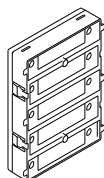


Door panel description.



Sound module

EL632/GB2, on video systems with color camera.



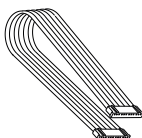
Push buttons electronic module

EL610D, for 5 single push buttons or 10 double push buttons.



Short connection cable, it is supplied with EL610D module (16 cm length).

For the connection of the push buttons between the sound module and the push buttons module EL610D and between push buttons modules EL610D.

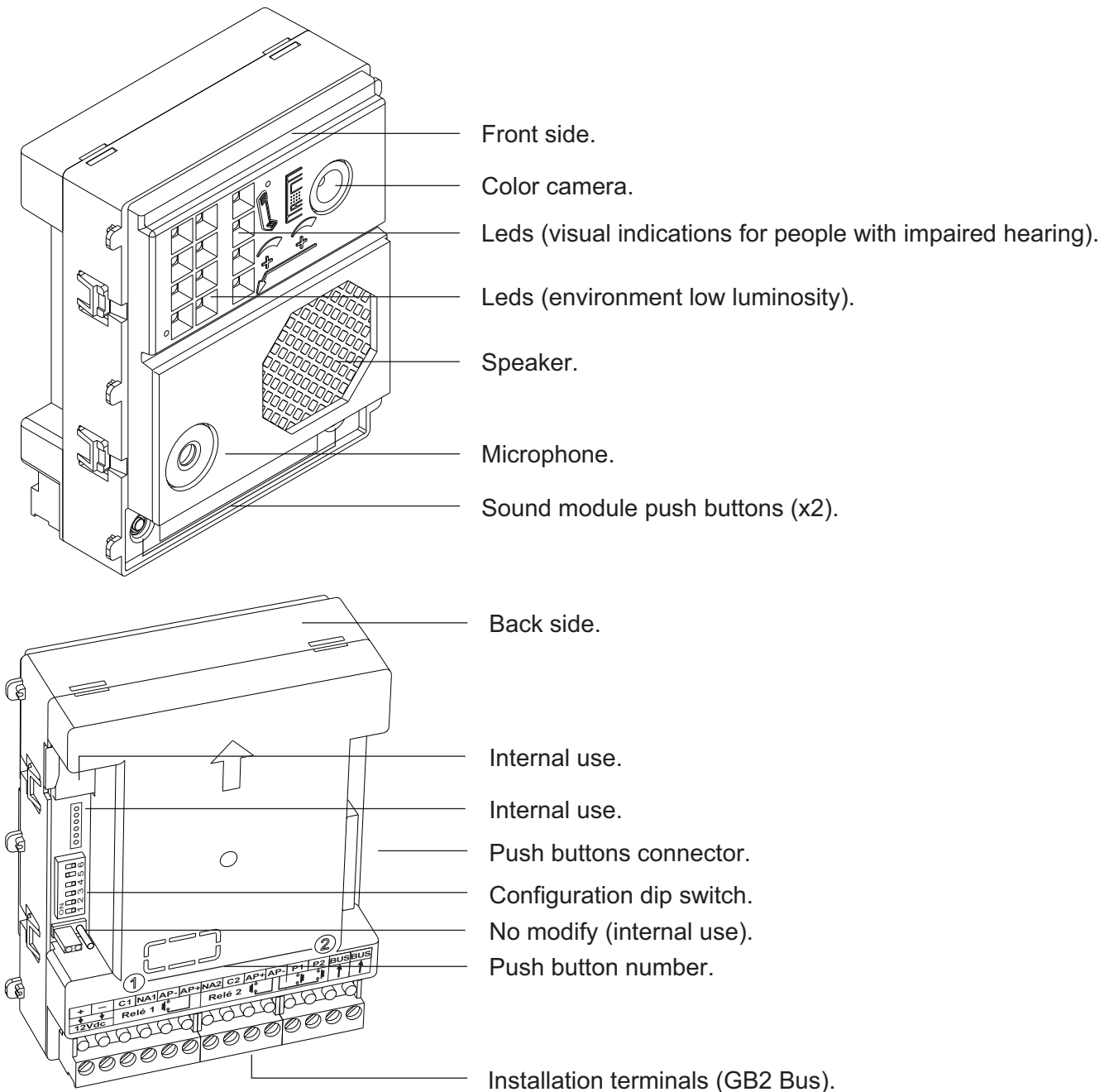


Connection cable RAP-610D (27 cm length).

For the connection of the push buttons between the sound module and the push buttons module EL610D and between push buttons modules EL610D.

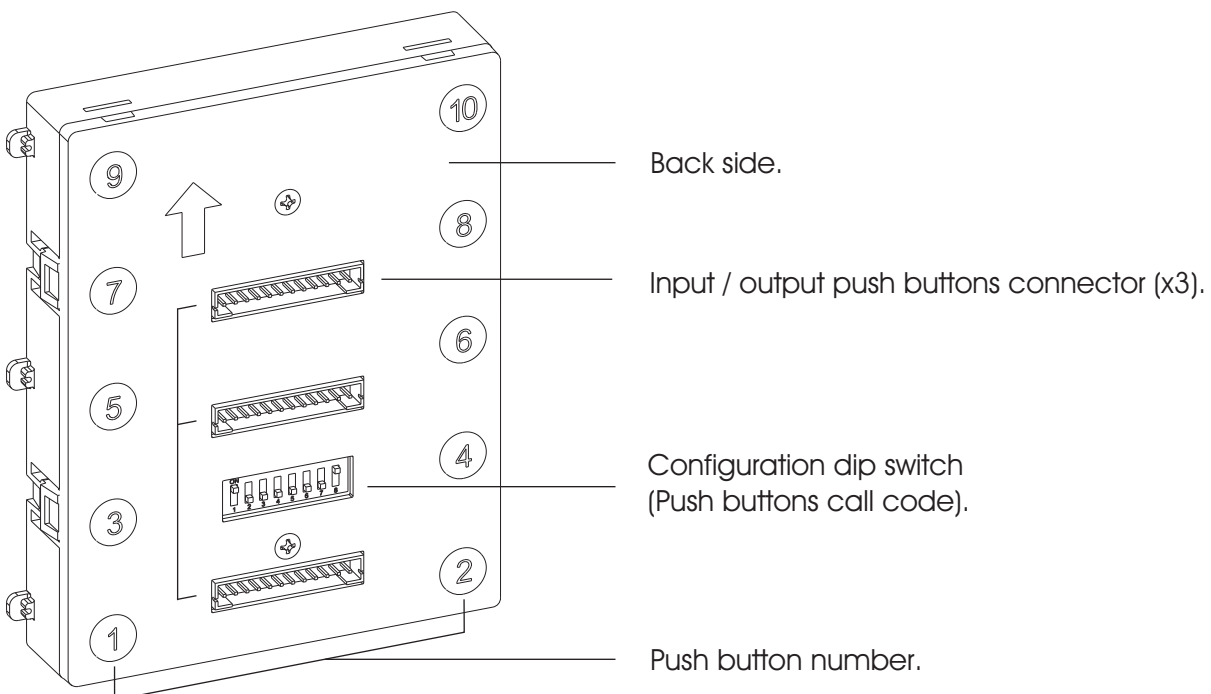
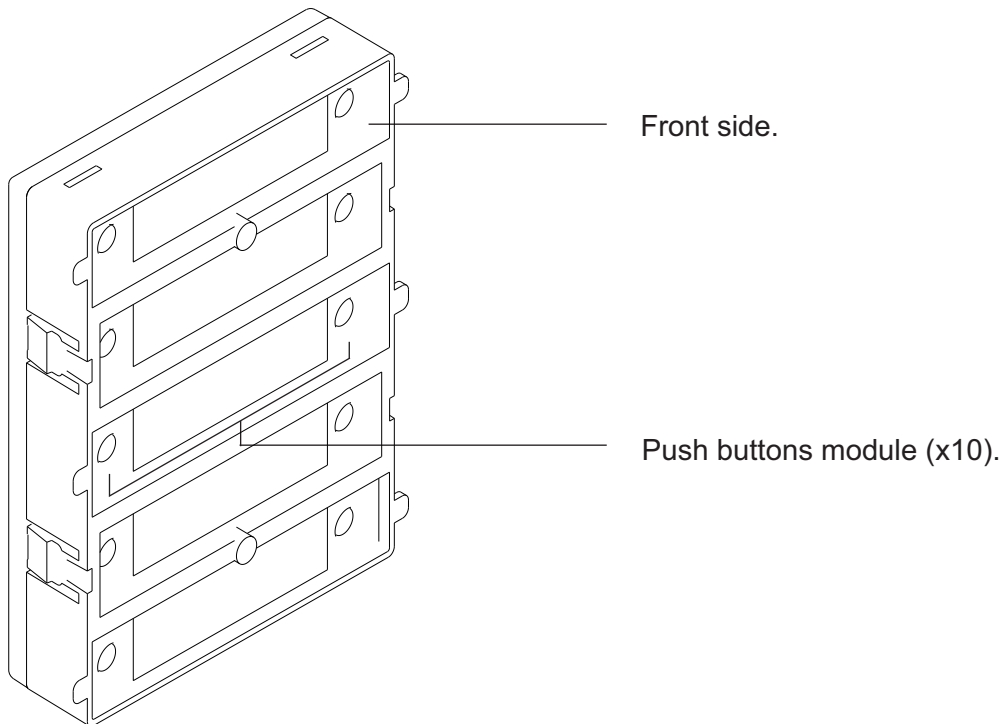
This cable is necessary when the distance between modules to connecting is greater due to the distribution of these modules in the door panel(s).

## SOUND MODULE DESCRIPTION (EL632/GB2)

Sound module description (EL632/GB2):Installation terminals:

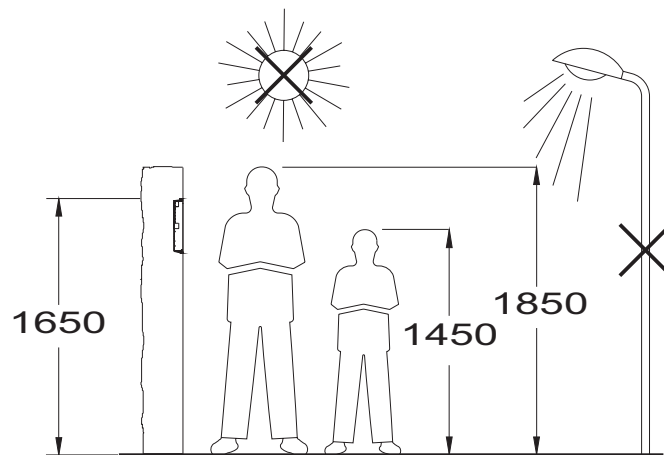
+, -	: Positive, ground (12Vdc output for Golmar 12Vdc lock release).
C1	: "C" contact for lock release (Relay 1).
NA1	: "N.O" contact for lock release (Relay 1).
AP -, AP +	: Input for external door release push button (Relay 1).
NA2	: "N.O" for lock release (Relay 2).
C2	: "C" contact for lock release (Relay 2).
AP +, AP -	: Input for external door release push button (Relay 2).
P1	: Input for external call push button (push button 1).
P2	: Input for external call push button (push button 2).
BUS	: Communication Bus (without polarity).
BUS	: Communication Bus (without polarity).

**Note:** See installation diagrams for wiring (pages 21 to 26).

**PUSH BUTTONS MODULE DESCRIPTION (EL610D)****Push buttons module description (EL610D):**



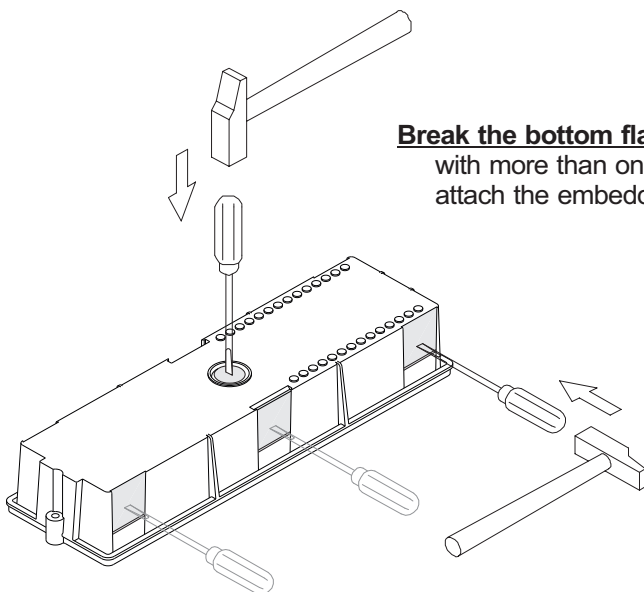
## DOOR PANEL INSTALLATION

**Embedding box positioning:**

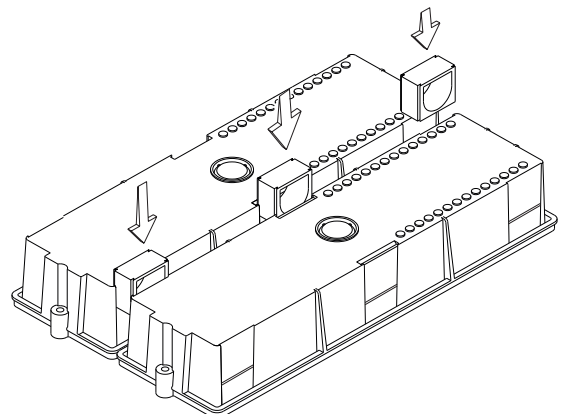
The upper part of the door panel should be placed at 1,65m. height roughly. The hole dimensions will depend on the type of door panel.

Modules Model	1 NCEV90CS	2 NCEV90C	3 CEV90
W	99	99	99 mm.
H	135,5	238	328 mm.
D	40	56	56 mm.

The door has been designed to be placed under most of the environmental conditions. However it's recommended to take additional cautions like (covered places, rainproof covers, ...). To obtain a good quality picture on video door entry systems, avoid direct incidence from light sources.

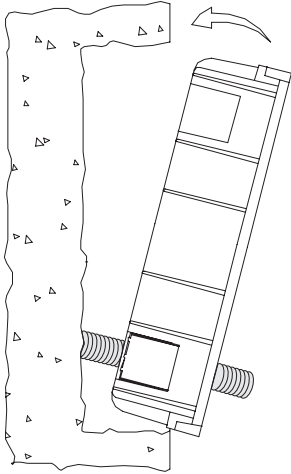
**Preparing the cables entry:**

**Break the bottom flange** to pass the cables through. In case of door panels with more than one embedding box, break the side flanges and attach the embedding boxes using UC junctions.



## DOOR PANEL INSTALLATION

### Place the embedding box:



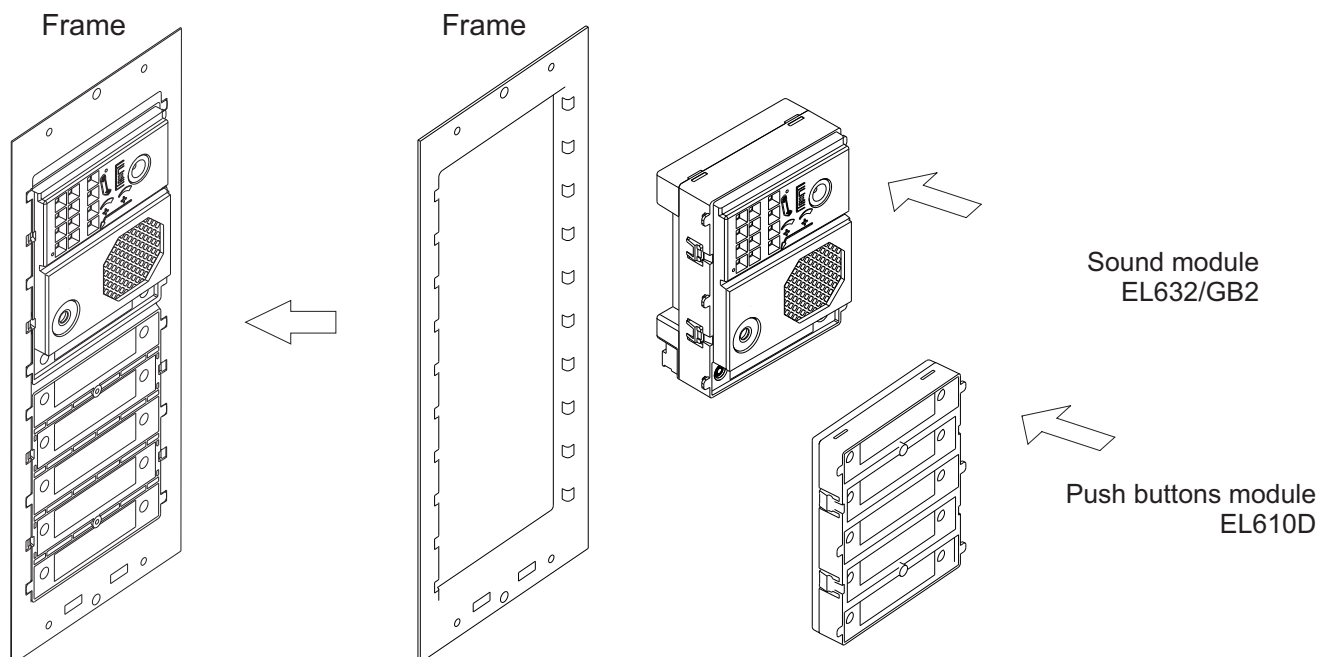
Pass the wiring through the hole made in the bottom part of the embedding box. Level and flush the embedding box. Once the embedding box is placed, remove the protective labels from the attaching door panel holes.

### Assembly electronic modules:

Insert the sound module in the top part of the module frame.

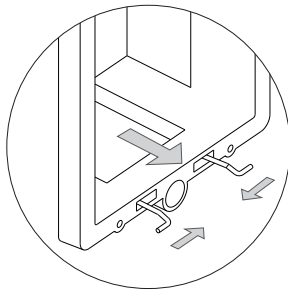
Align the tabs on the sound module in their respective housings of the module frame and then exercise a light pressure until correct placement.

If there is push buttons module repeat the above process, locating under the sound module, as shown in the drawing.



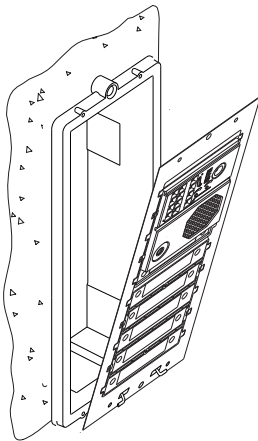


## DOOR PANEL INSTALLATION

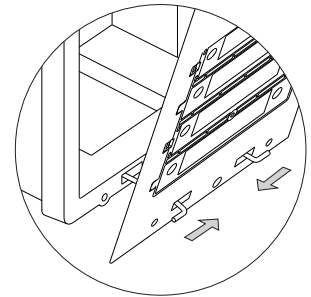
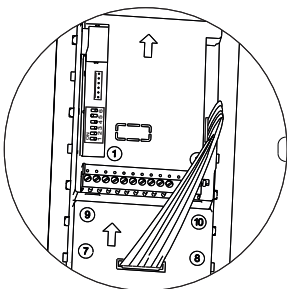
**Hold the frame on the embedding box:**

Insert the hinge that it is supplied with the product in the embedding box, as shown in the drawing.

To hold the frame on the embedding box, insert the hinge in the housings arranged for this purpose in the frame, as shown in the drawing.

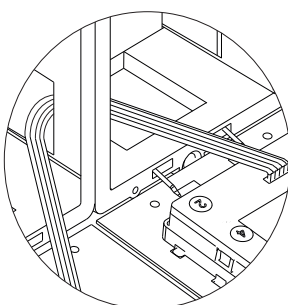
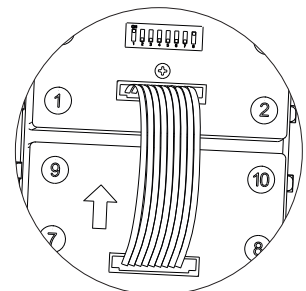


The frame can now be folded horizontally facilitating the connection and adjustments in the sound module and push buttons electronic module.

**Plug the push buttons with the short connection cable:**

Insert the short connection cable that it is supplied with the product EL610D, in the push buttons connector of the sound module and the other end of the connection cable in the connector placed in the top part of the push buttons EL610D module, as shown in the drawing.

Between push buttons modules EL610D of the same embedding box, insert the short connection cable of the low connector of the first push buttons module to the top connector of the second push buttons module, as shown in the drawing.

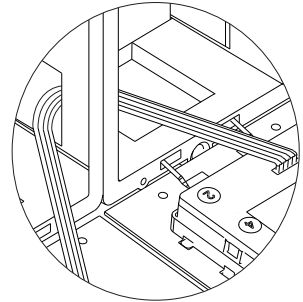


Between push buttons modules EL610D of different embedding boxes, insert the short connection cable in the low connector of the last module EL610D of the first embedding box and the other end of the connection cable in the middle connector of the last push buttons module EL610D placed in the low part of the second embedding box, as shown in the drawing.

## DOOR PANEL INSTALLATION

**Plug the push buttons with the connection cable RAP-610D:**

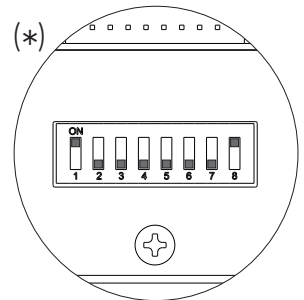
Use the connection cable RAP-610D, for the connection of the push buttons between the sound module and the push buttons module EL610D and between push buttons modules EL610D, when the distance between modules to connecting is greater due to the composition of the door panels.

**Configuration of the push-buttons code:**

The push buttons module EL610D must be configured, to assign a call code to the push buttons. Make this configuration with the dip switch placed in the back side of the module.

Depending on the setting selected, the push buttons are assigned to a specific call code.

To configure the monitor address call code, it will be necessary to know the call code of each push button, as shown in the table below.

**Push buttons module EL-610D*****Double push button module coding***

		Dip switch								Push buttons code										(1)
		Dip1	Dip2	Dip3	Dip4	Dip5	Dip6	Dip7	Dip8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	
Module configuration option	1	On	Off	Off	Off	Off	Off	Off	On	11	2	3	4	5	6	7	8	9	10	(*)
	2	Off	On	Off	Off	Off	Off	Off	On	21	12	13	14	15	16	17	18	19	20	
	3	Off	Off	On	Off	Off	Off	Off	On	31	22	23	24	25	26	27	28	29	30	

***Single push button module coding***

		Dip1	Dip2	Dip3	Dip4	Dip5	Dip6	Dip7	Dip8	P1	P2	P3	P4	P5	(1)
Module configuration option	1	On	Off	Off	Off	Off	Off	Off	On	1	2	3	4	5	(*)
	2	Off	On	Off	Off	Off	Off	Off	On	6	7	8	9	10	
	3	Off	Off	On	Off	Off	Off	Off	On	11	12	13	14	15	
	4	Off	Off	Off	On	Off	Off	Off	On	16	17	18	19	20	
	5	Off	Off	Off	Off	On	Off	Off	On	21	22	23	24	25	
	6	Off	Off	Off	Off	Off	On	Off	On	26	27	28	29	30	
	7	Off	Off	Off	Off	Off	Off	On	On	31	—	—	—	—	

(1) P1- P10: Push button 1 to push button 10.

**Note:** Sound module, factory set the code "0" in P1 and "1" in P2.

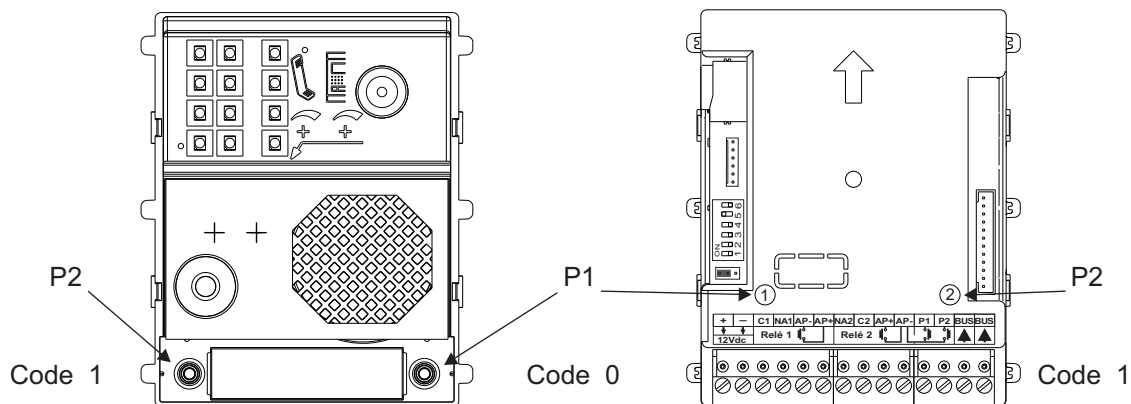
**Important:** Select a different configuration option for each module EL610D.

(\*) Factory default.

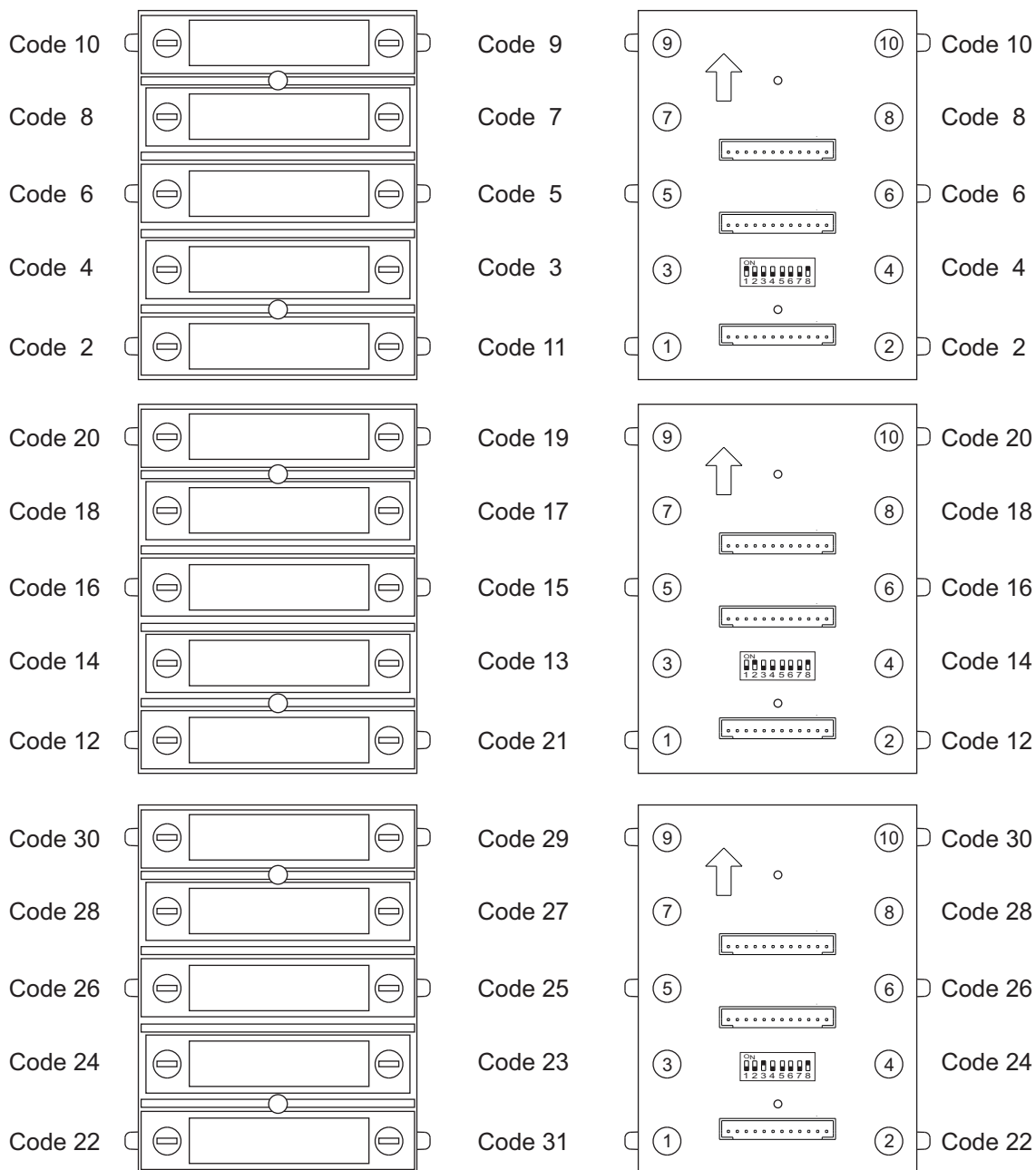
## DOOR PANEL INSTALLATION

### Double push button module coding:

#### EL632/GB2



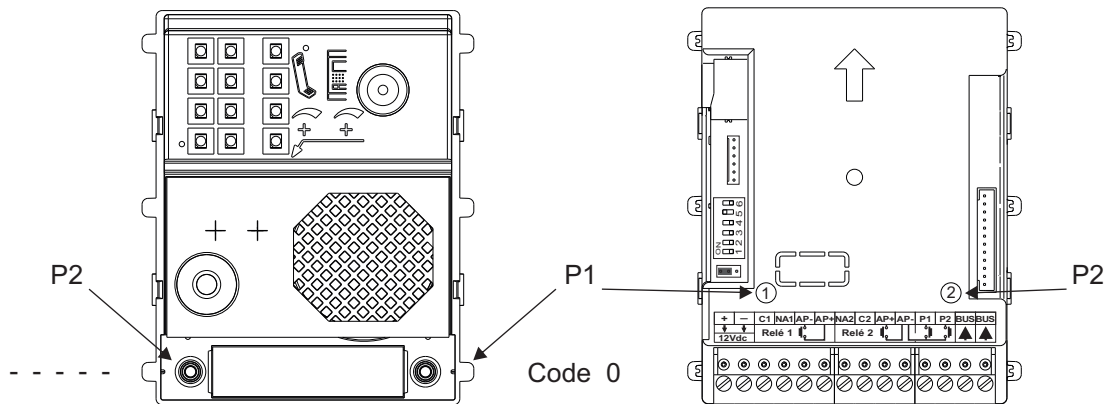
#### EL610D



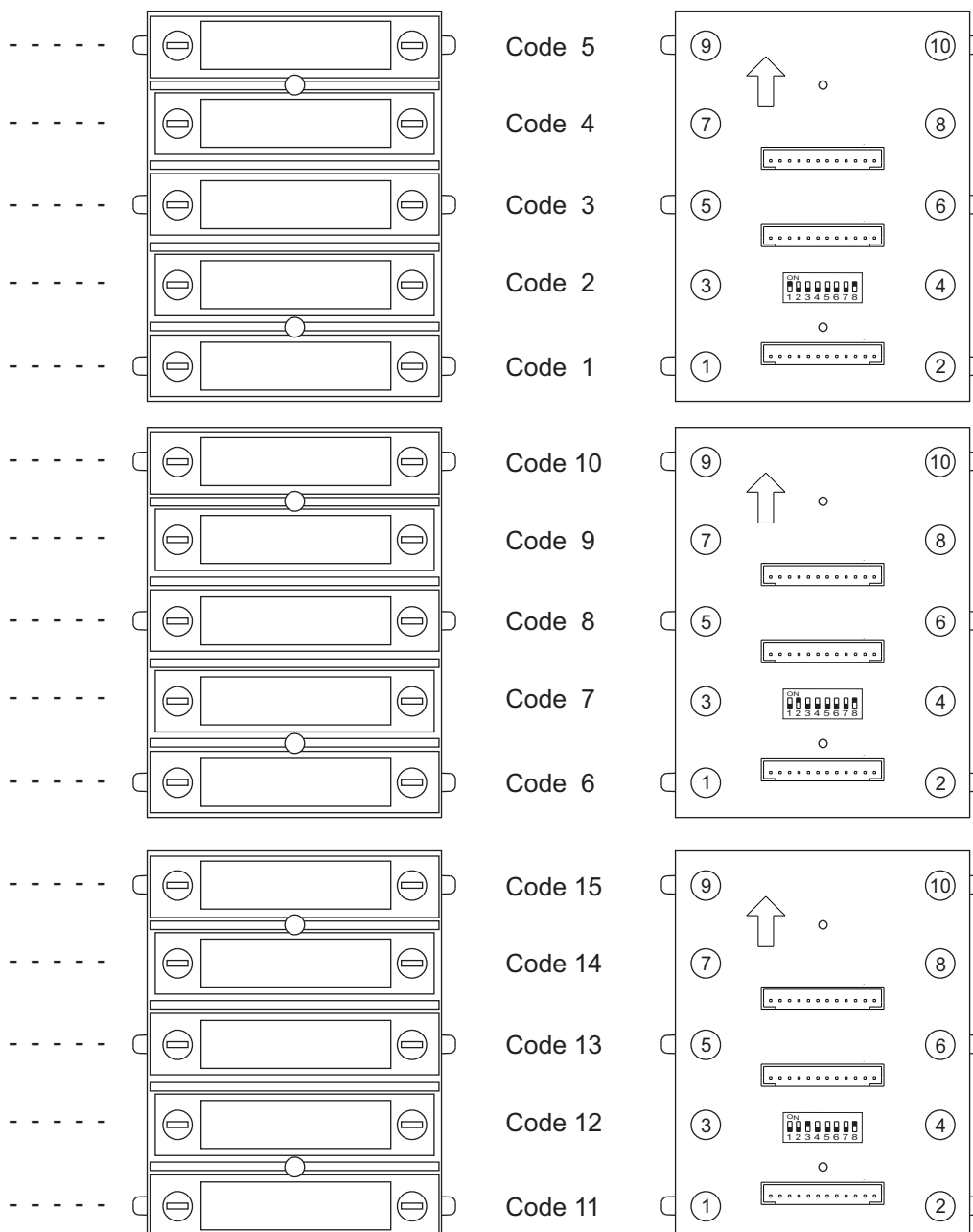
## DOOR PANEL INSTALLATION

**Single push button module coding:**

**EL632/GB2**



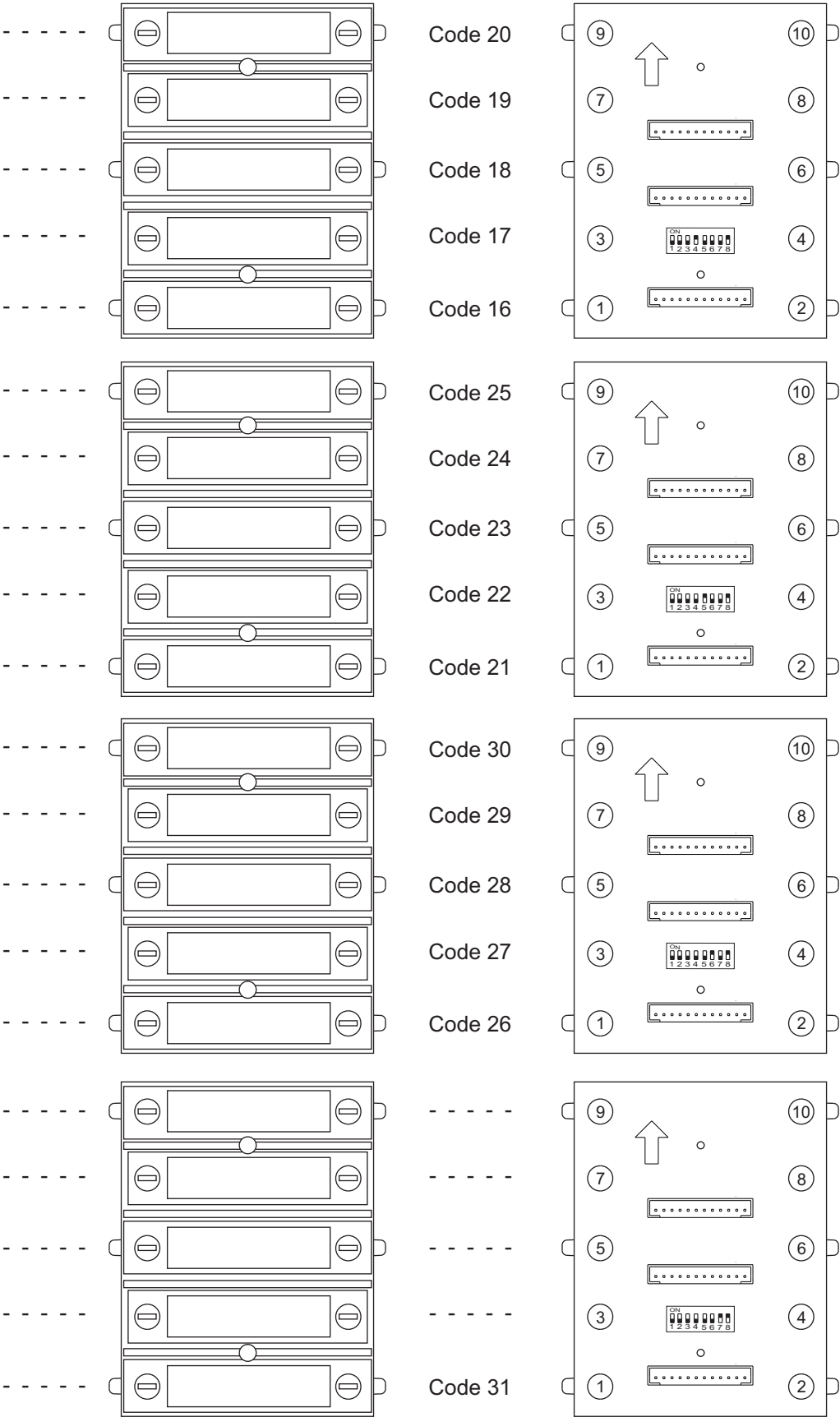
**EL610D**



DOOR PANEL INSTALLATION

Coming from previous page.

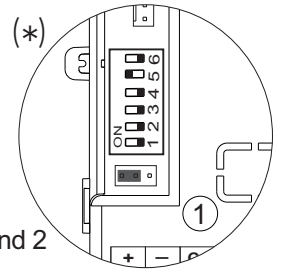
EL610D


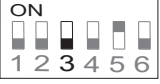
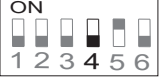




## DOOR PANEL INSTALLATION

### Configuration dip switch of the sound module (EL632/GB2):

The configuration dip switch is located on the left side of the rear part of the module.

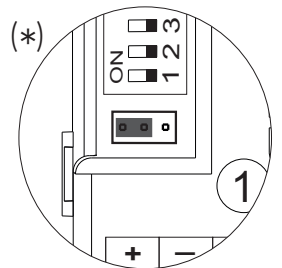


- (\*)  Door Panel Address:  
Dip switches: 1 and 2 OFF (address 1), 1 ON and 2 OFF (address 2), 1 OFF and 2 ON (address 3), 1 and 2 ON (address 4).
- (\*)  Set to OFF for door panels with double push buttons and set to ON for door panels with single push buttons.
- (\*)  Set to OFF for door panels to be used in villas and set to ON for use in buildings.
- (\*)  Set to ON to configure the door release time to 5 seconds. Set to OFF to configure the door release time to 1 second
- (\*)  Set to ON to configure: (see page 16)  
The vocal synthesis language (using the sound module's P1 push button).  
The door release Relay 1 and Relay 2 to N.O or N.C (using the sound module's P2 push button). Set to OFF when configuring is complete.

(\*) **Factory default.**

### Description of the configuration jumper:

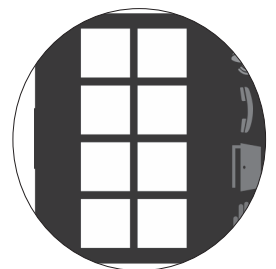
**Important:** Do not change the factory default position of the configuration jumper.



(\*) **Factory default.**









### Description of the door panel LED lights (low light conditions):

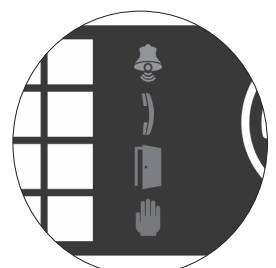
The door panel LED lights will turn on during a call if there is low light, allowing the person who called to be seen on the apartment's monitor.



### Description of the visual indications on the door panel:

Visual indications on the door panel for people with impaired hearing:

- While calling: The led  will turn on during the call and while in communication.
- During communication: The led  will turn on during the communication process.
- During door release: The led  will turn on during door release.
- End of communication: The leds  and  will turn off.
- Calling at one door panel while another door panel is communicating (with more than one door panel):  
The led  will turn on for 3 seconds.
- While calling and the monitor is in (do not disturb) mode: The led  will turn on for 4 seconds.
- While calling (apartment with no monitor or telephone): The led  will turn on for 4 seconds.





## DOOR PANEL INSTALLATION

### **Description of the vocal synthesis (audible indications from the door panel):**





Audible indications from the door panel for people with impaired vision.

If the vocal synthesis in the sound module is activated (see pages 14 and 16 to configure), a voice with the following messages can be heard from the door panel:

- While calling: "Call is in progress".
- Start communication: "You can speak now".
- During door release: "Door is open".
- End of communication: "Communication is finished".
- Calling at one door panel while another door panel is communicating (with more than one door panel): "System is busy, try later".
- While calling and the monitor is in "Do not disturb" mode: "Resident unavailable".
- While calling (apartment with no monitor or telephone): "Resident unavailable".





### **Adjusting the door panel communication volume:**

If after starting the system the door panel audio volume seems inadequate, follow these steps:

- Call an apartment.
- The call is received in the apartment. Establish communication by pressing the  push button on the monitor.
- Next, press the same push button used to call the apartment for 3 seconds until a series of confirmation tones are heard and the door panel communication led's  starts to blink.
- Each press on the same call push button will increase the door panel volume and the led's blink speed.  
There are 5 volume settings and the led's  blink speed will vary for each. Slow to fast blink - low to high volume. After reaching "setting 5", that is maximum blink speed and volume, the next setting is "setting 1", that is minimum blink speed and volume (carousel mode).
- To save the volume setting keep the same push button used to call the apartment pressed until a series of confirmation tones are heard and the door panel communication LED  turns off.

### **Adjusting the vocal synthesis volume:**

If after starting the system the vocal synthesis volume of the door panel seems inadequate, follow these steps:

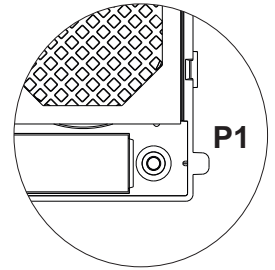
- Within 10 seconds of connecting power to the door panel press any call push button on the door panel.
- Keep the call push button pressed until the synthesis volume is heard and the door panel communication led  starts to blink.
- Each press on the same call push button will increase the synthesis volume and the LED's  blink speed.  
There are 5 volume settings and the LED's  blink speed will vary for each. Slow to fast blink - low to high volume. After reaching "setting 5", that is maximum blink speed and volume, the next setting is "setting 1", that is minimum blink speed and synthesis volume (carousel mode).
- To save the volume setting keep the same push button used to call the apartment pressed until a series of confirmation tones are heard and the door panel communication LED  turns off.

## DOOR PANEL INSTALLATION

### Selecting the vocal synthesis language:

To activate the voice synthesis of the door panel, follow these steps:

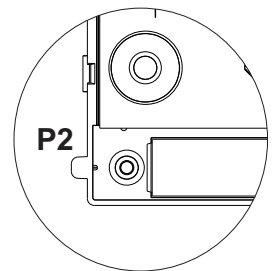
- Set dip 6 of the sound module's configuration dip switch to ON (see page 14), a confirmation tone will be heard.
- The desired language can be set using the sound module's P1 push button.
- Each press will change the language. Continue doing this until the desired language is heard.
- Once finished set dip 6 on the configuration dip switch to OFF. A confirmation tone will be heard



### Configuring the contact type for Relay 1 and Relay 2 (door release):

To change the contact type for door release activation of Relay 1 and Relay 2 of the door panel, follow these steps:

- Set dip 6 of the sound module's configuration dip switch to ON (see page 14), a confirmation tone will be heard.
- Use the sound module's P2 push button to select the desired contact type (N.O factory default or N.C).
- Each press will change the contact type. A long confirmation tone will be heard if the selected contact is N.O or two short tones if the selected contact is N.C. Stop pressing P2 when the desired tone is heard.
- Once finished set dip 6 on the configuration dip switch to OFF. A confirmation tone will be heard.

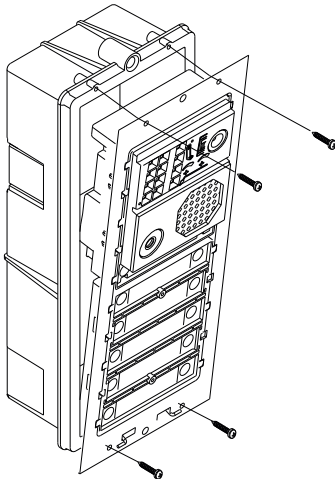


**Description:**

Normally open: N.O.  
Normally closed: N.C

**Important:** The selected contact type will apply to both Relay 1 and Relay 2.

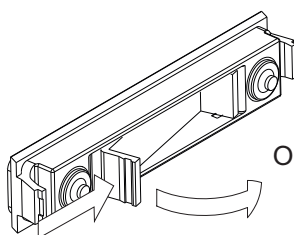
### Close the frame:



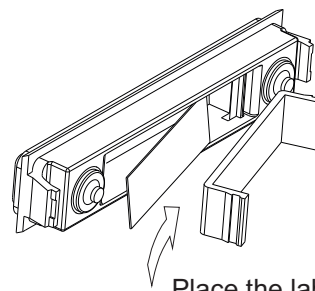
Once finished the works of wiring, configuration and adjustments, fix the frame in the embedding box with the supplied screws.

**Important:** Before closing the door panel(s), make a test call to any apartment to ensure that it works correctly.

### Place the nameplate labels:



Open the label holder.



Place the label and close.

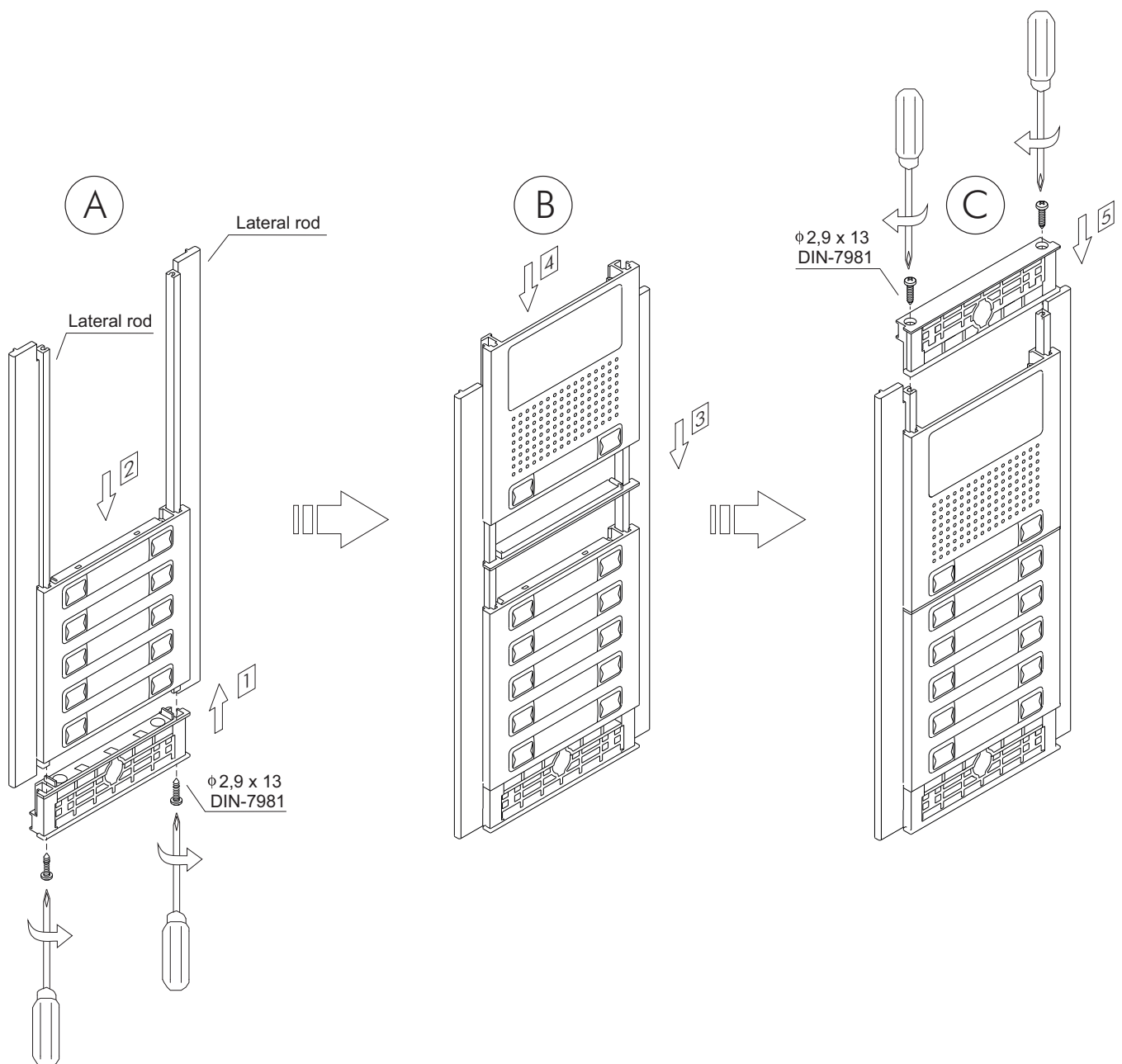
## DOOR PANEL INSTALLATION

### Door panel assembly:

Insert a header in the lateral rods (at the bottom part) and fix it with the supplied screws (step 1), then insert the module (step 2). If the door panel is more than one module insert first the lower module, see picture (A).

Place the spacer module (step 3) and insert the next module (step 4) see picture (B). Repeat this procedure in case of door panels with one more module (the maximum number of modules placed vertically is three).

To finish insert the second header (step 5) in the lateral rods (at the top part) and fix it with the supplied screws, see picture (C).



## DOOR PANEL INSTALLATION

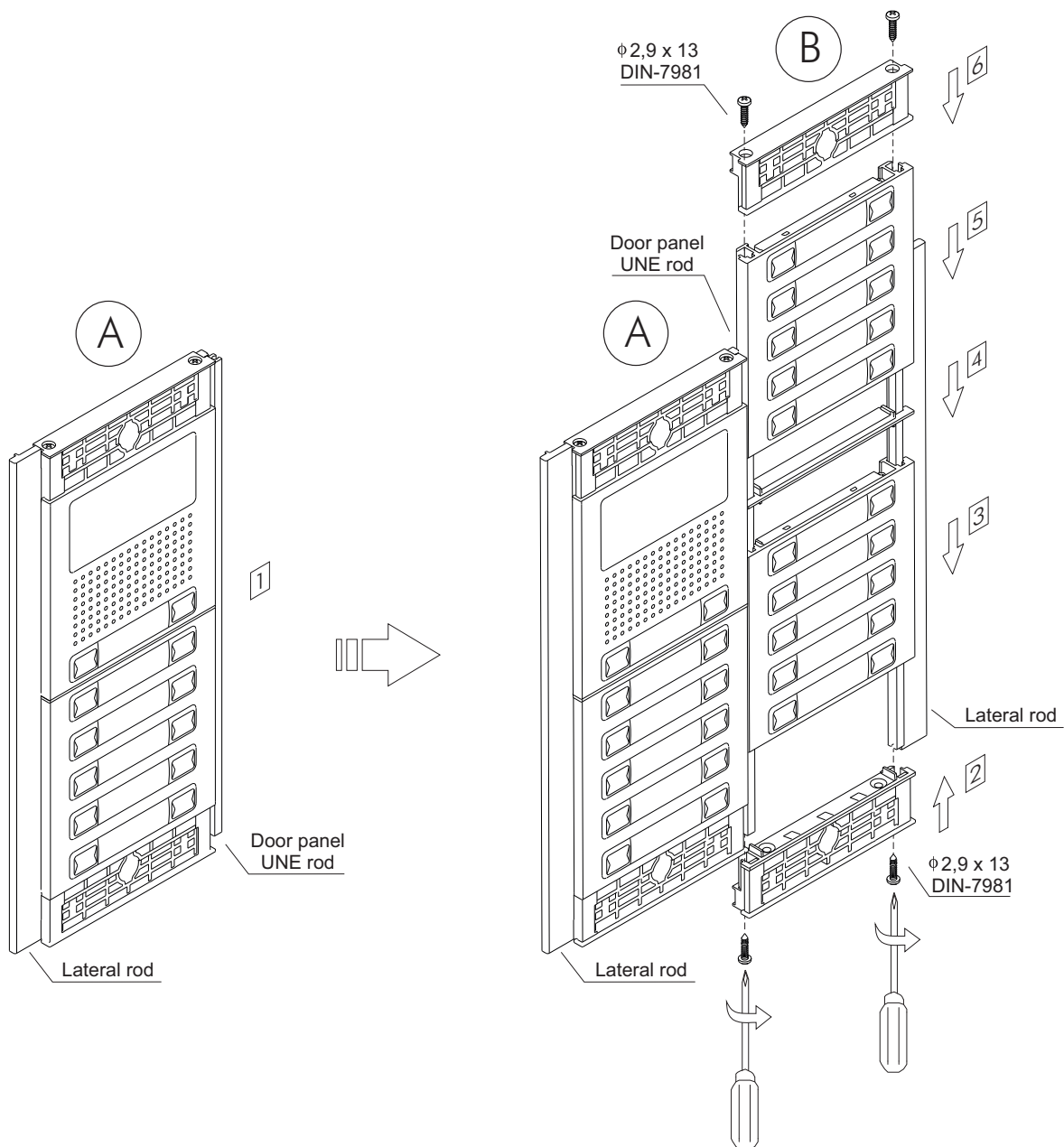
### Double door panel assembly:

Assembly the door panel (A) (step 1), as it is described in page 17 "door panel assembly". Bear in mind that the rod that will join the door panel (A) and the door panel (B) have to be of the type door panel UNE rod, see picture below.

Insert a header between door panel UNE rod and the second lateral rod (at the bottom part) and fix it with the supplied screws (step 2), then insert the module (step 3). If the door panel is more than one module insert first the lower module.

Place the spacer module (step 4) and insert the next module (step 5). Repeat this procedure in case of door panels with one more module (the maximum number of modules placed vertically is three).

To finish insert the last header between door panel UNE rod and the second lateral rod (at the top part) and fix it with the supplied screws (step 6).



**IMPORTANT:** Once finished the adjustments, stick the adhesive gasket (that it is supplied with the set of closing heads N60XX CMPL) in the door panel UNE rod.

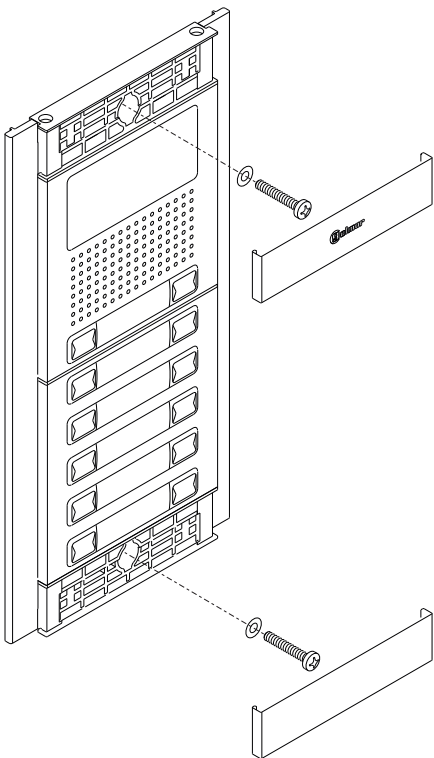
## DOOR PANEL INSTALLATION

### Close the door panel:

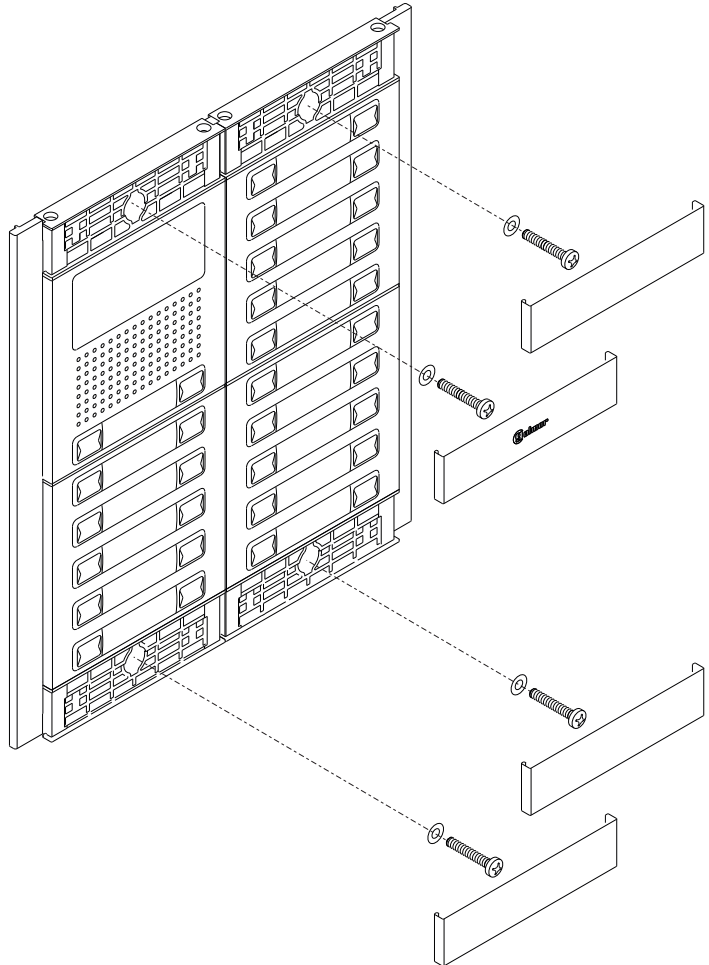
Fix the door panel in the embedding box with the supplied screws.

Finish the door panel assembly by placing the closing heads, put the head on one side and then make a slight pressure on the other end, to its correct placement.

### Door panel:



### Double door panel:



## POWER SUPPLY INSTALLATION

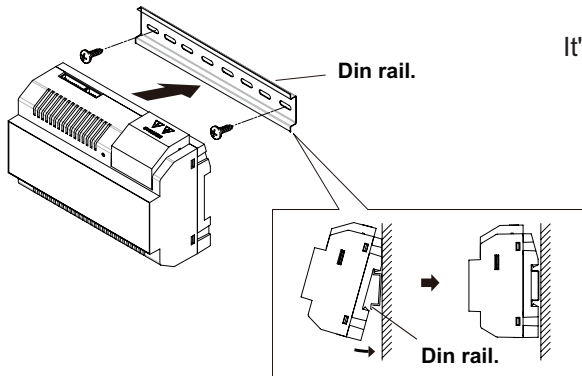
### Installing the FA-GB2 power supply:

Install the power supply in a dry and protected place without risk of drip or water projections.

To avoid an electrical shock, neither remove the primary protection cover nor handle the connected wire in the terminals.

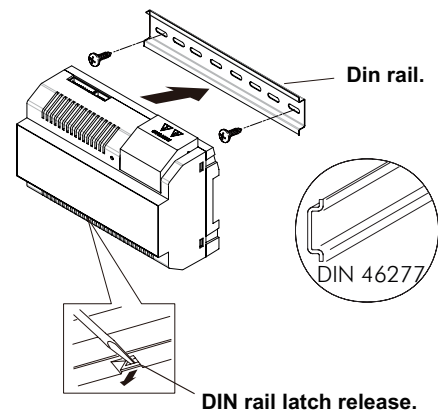
The installation and handling of these equipments must be performed by authorised personnel and without the power connected.

To avoid damage, the power supply has to be firmly fixed.



It's recommended to protect the power supply by using a thermo-magnetic circuit breaker.

Mount the din rail to the wall with wallplugs and screws that are supplied with power supply.  
Next, place the power supply simply pressing it.



The power supply can be installed on a DIN 46277.

To disassemble the power supply from the DIN rail, use a plain screwdriver to lever the flange as shown on the picture.

The FA-GB2 model uses 8 units over DIN rail.

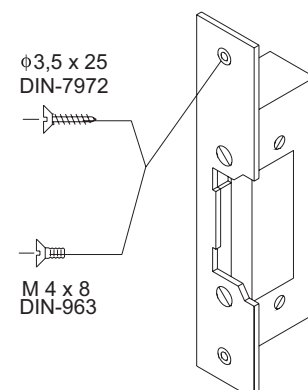
**IMPORTANT:** The maximum number of units that can be connected to a FA-GB2 power supply is 20 monitors "VESTA GB2" or 15 monitors "THERA GB2".

**Replace the protection cover once the input terminals have been wired.**

## LOCK RELEASE INSTALLATION

### Installing the lock release:

If the lock release will be installed in a metal door, use a Ø3,5mm. drill and tap the hole. In case of wood door, use a Ø3mm. drill.

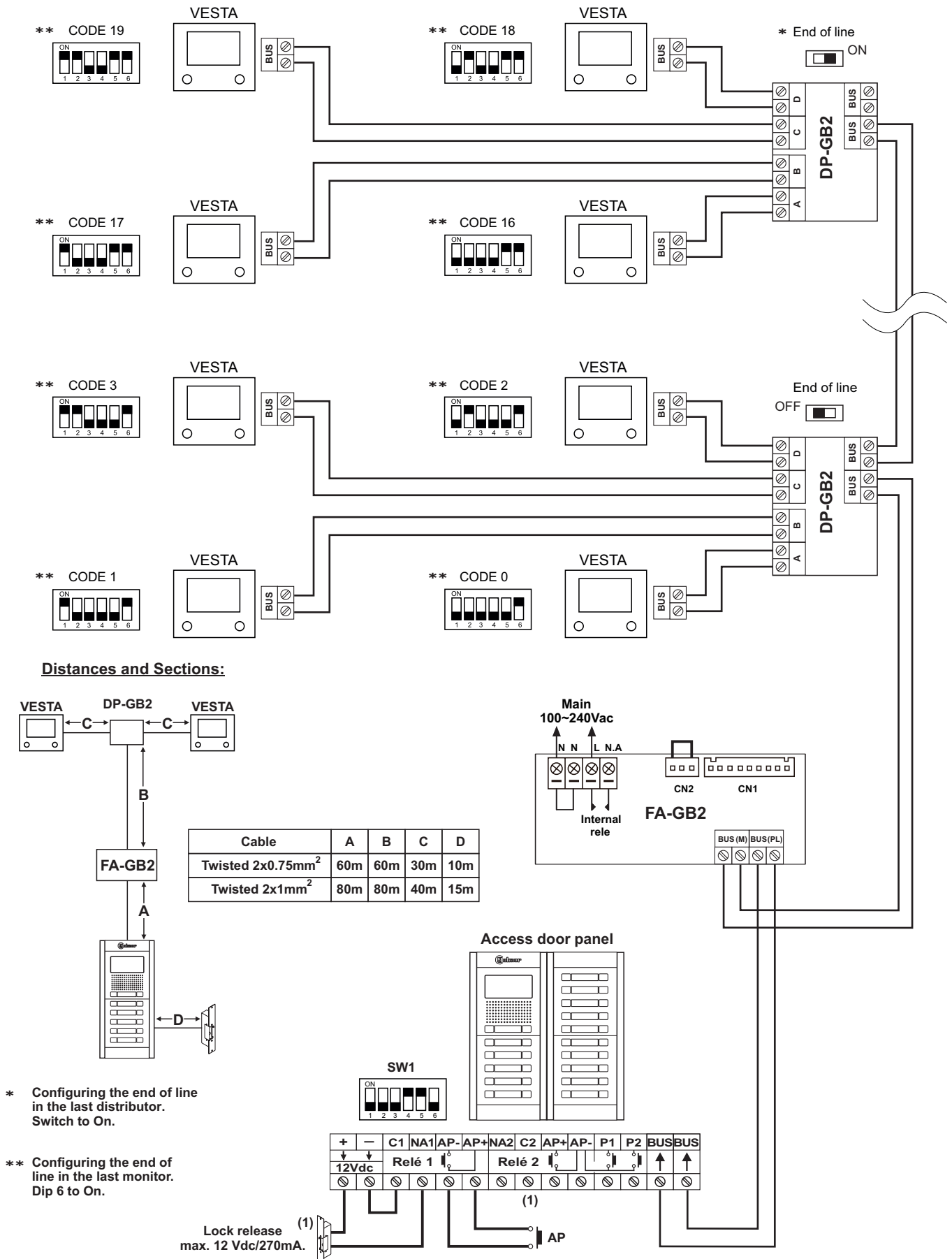


**IMPORTANT:** The lock release must be of (Golmar) 12Vd.c or a.c.  
See page 26 (a.c lock release) and pages 21 to 26 (d.c lock release).



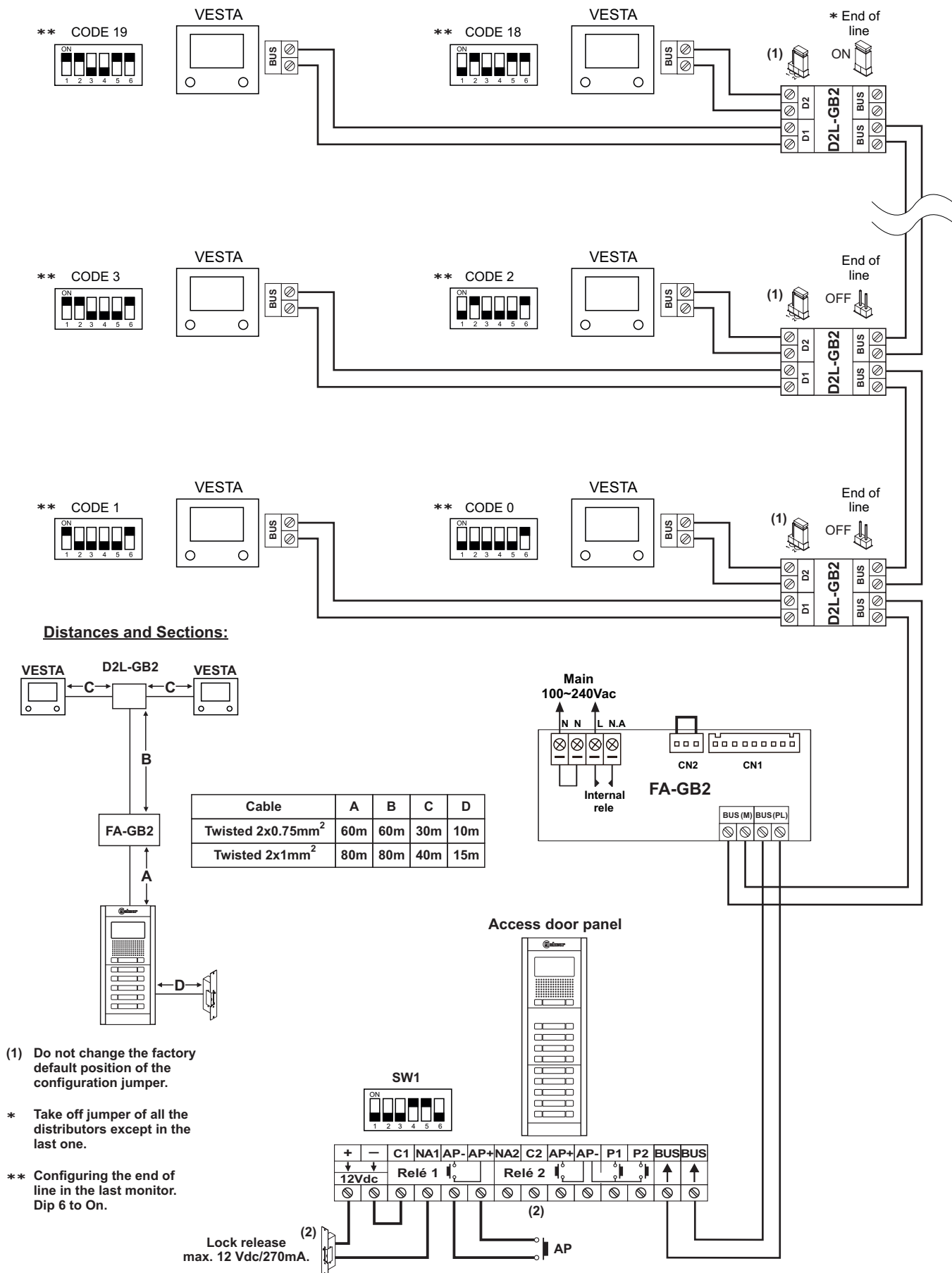
## INSTALLATION DIAGRAMS

***Video installation with 20 VESTA monitors, 5 DP-GB2 distributors and Golmar 12Vd.c lock release:***



## INSTALLATION DIAGRAMS

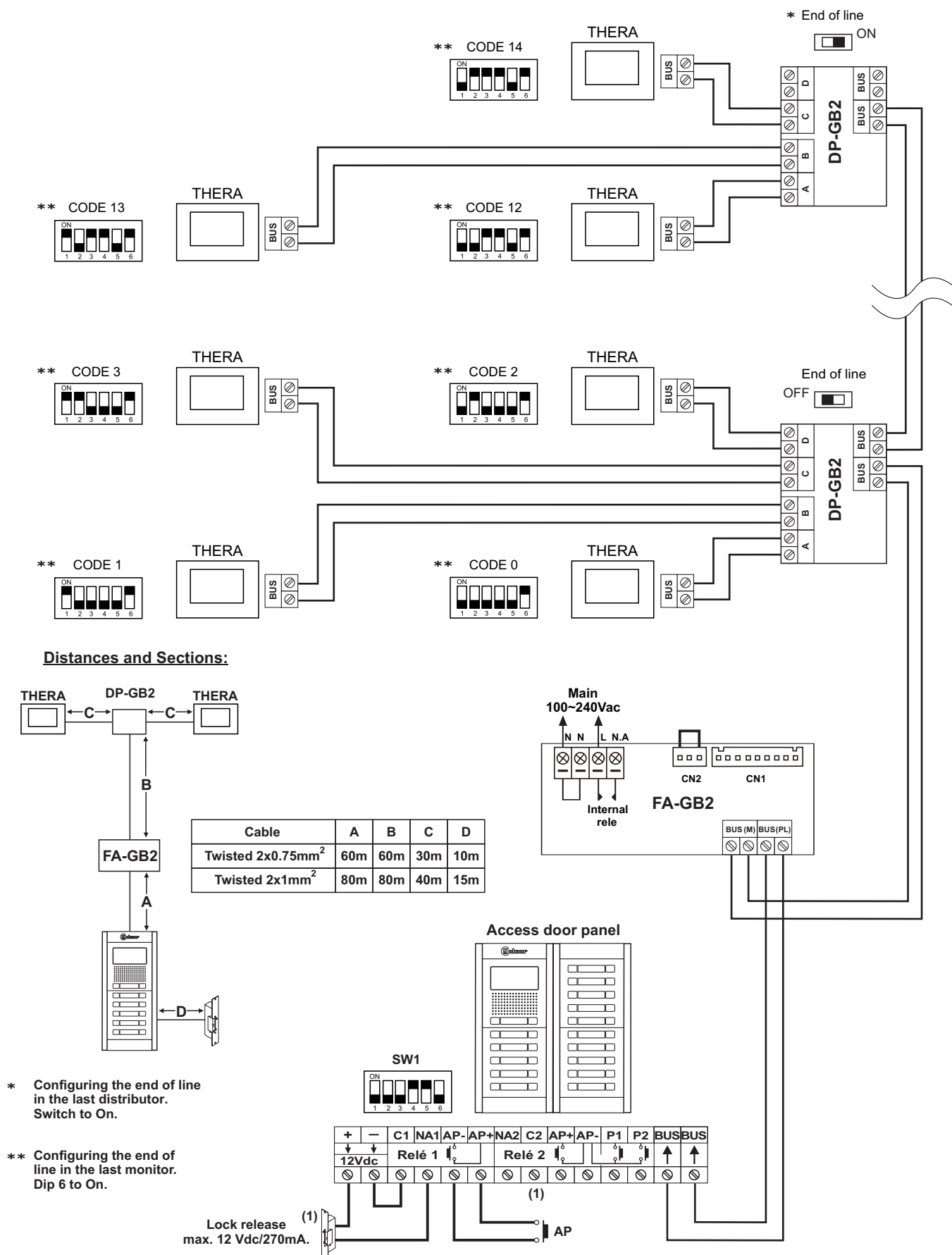
**Video installation with 20 VESTA monitors, 10 D2L-GB2 distributors and Golmar 12Vd.c lock release:**



**(2) Important:** For connection of 12Va.c lock release or a 2nd lock release, (see page 26).

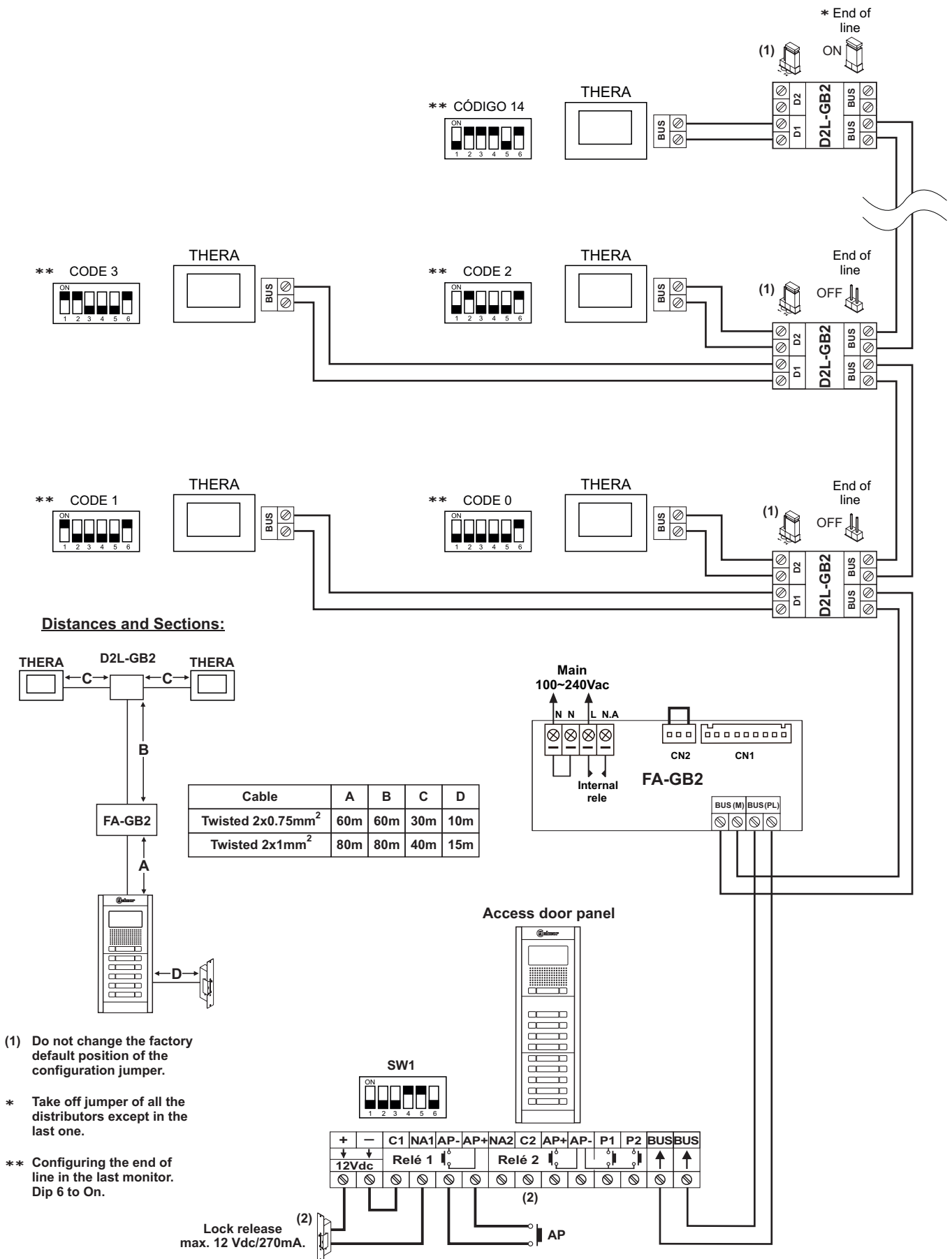
## INSTALLATION DIAGRAMS

***Video installation with 15 THERA monitors, 4 DP-GB2 distributors and Golmar 12Vd.c lock release:***



## INSTALLATION DIAGRAMS

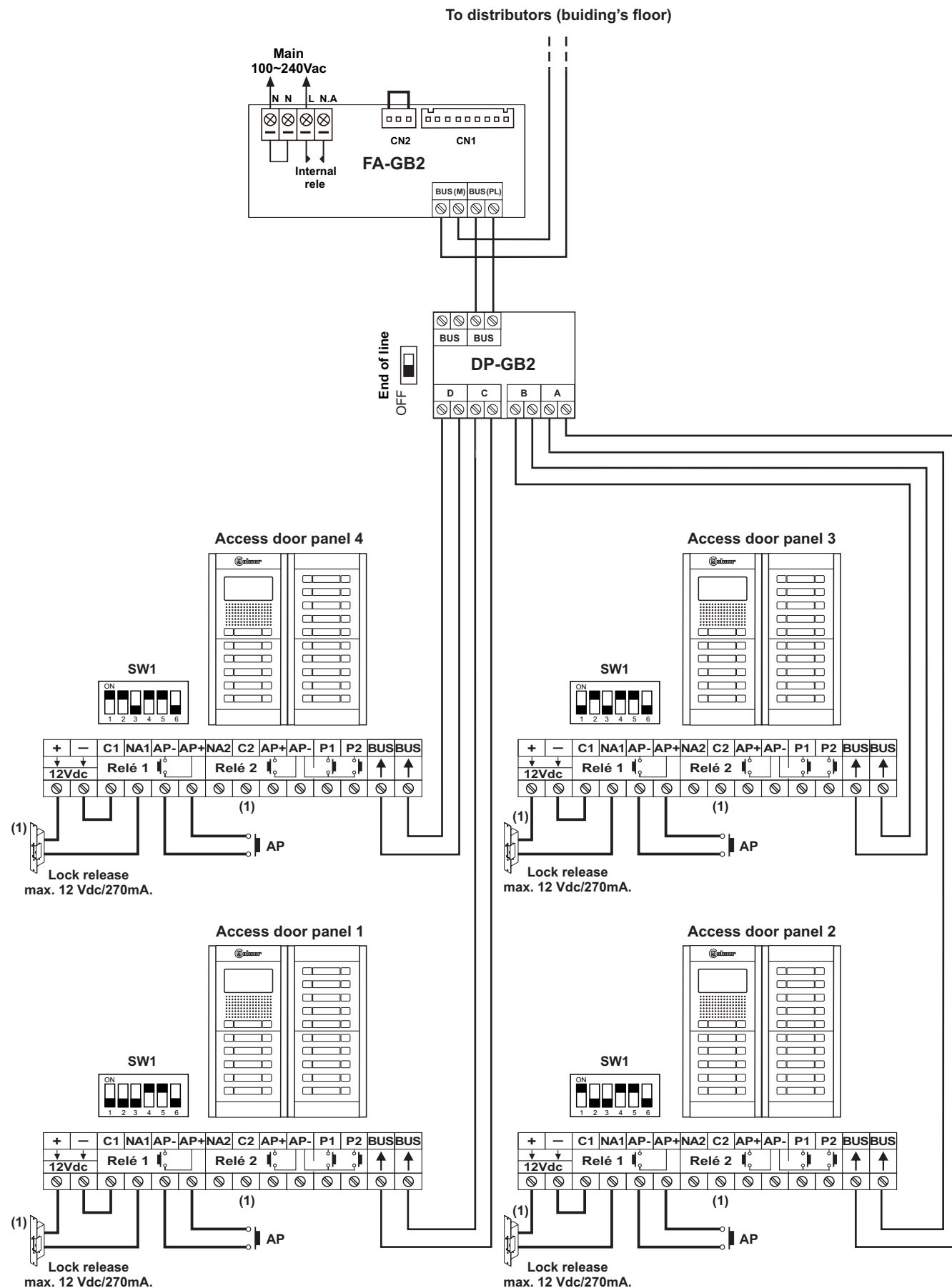
**Video installation with 15 THERA monitors, 8 D2L-GB2 distributors and Golmar 12Vd.c lock release:**



(2) Important: For connection of 12Vd.c lock release or a 2nd lock release, (see page 26).

## INSTALLATION DIAGRAMS

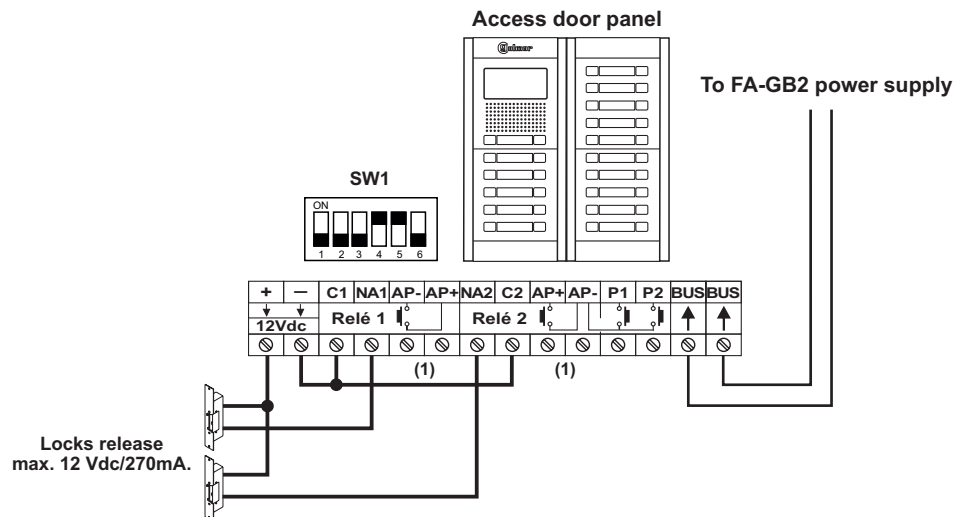
***Video installation with 4 access doors, DP-62 distributor for door panels and Golmar 12Vd.c lock release:***



## INSTALLATION DIAGRAMS

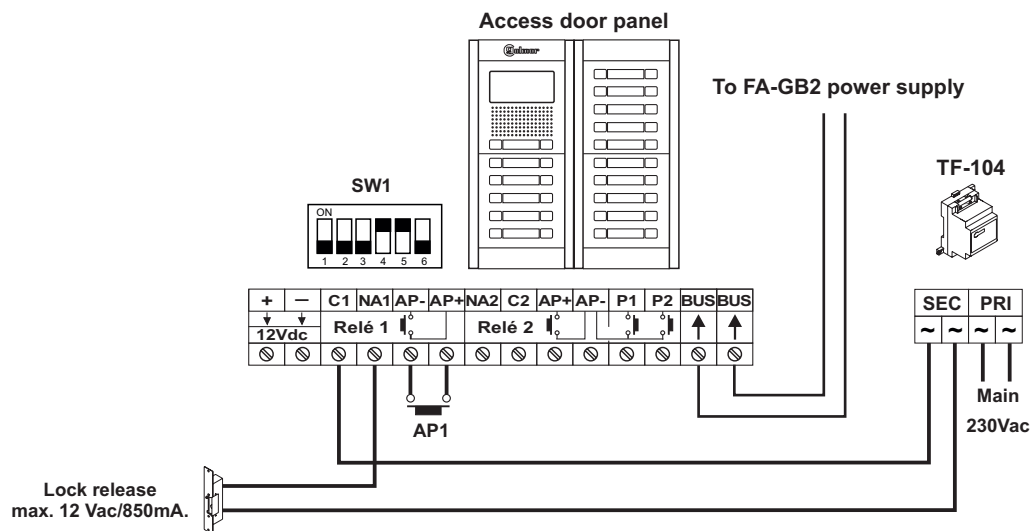
### Connexion of d.c and a.c Golmar locks release.

#### Connexion of 2 d.c locks release without "AP":

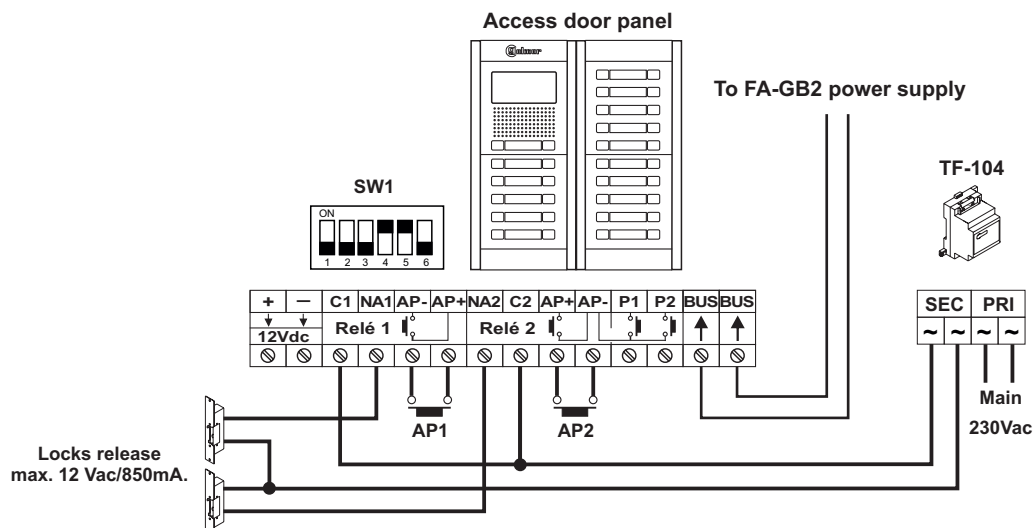


(1) Important: Do not use the "AP" push buttons door release if there are connected 2 d.c locks release.

#### Connexion of 1 a.c lock release with "AP":



#### Connexion of 2 a.c locks release with "AP":





**NOTES:**

[illegible]



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